

Claims

1. An apparatus for feeding porous sheets of media from a stack of such sheets, the apparatus comprising

a retaining structure that is configured to retain the stack in an aligned condition;

5 a pick-up device that is operatively arranged with respect to the retaining structure, the pick-up device including a gas conduit that is in fluid communication with a gas supply and a nozzle arrangement that is in fluid communication with the gas conduit, the nozzle arrangement being shaped to define a pick-up surface, the pick-up device being displaceable along a feed path relative to the retaining structure, the pick-up device being positioned so that the nozzle
10 arrangement is capable of directing a flow of gas onto a first sheet of the stack such that the gas passes partially through the first sheet and impinges on a second sheet, generating a cushion of air between the first and second sheets to separate the first and second sheets, the gas supply being reversible so that the first sheet can be drawn towards the pick-up surface and retained against the pick-up surface; and

15 a displacement mechanism that is operatively arranged with respect to the retaining structure for displacing the pick-up device along the feed path so that the first sheet is fed from the stack along the feed path.

2. An apparatus as claimed in claim 1, in which the nozzle arrangement is shaped so that, as
20 the gas flow is applied to the first sheet at a suitable rate, a region of relatively low pressure is generated between the pick-up surface and the first sheet thereby to facilitate displacement of the first sheet towards the pick-up surface.

3. An apparatus as claimed in claim 1, which includes a feed mechanism that is operatively
25 positioned with respect to the retaining structure, downstream of the pick-up device for receiving the first sheet from the pick-up device.

4. An apparatus as claimed in claim 3, in which the feed mechanism is in the form of a roller
30 assembly.

5. An apparatus as claimed in claim 1, in which the pick-up device includes a pick-up bar that spans the stack of media, the nozzle arrangement being mounted on the pick-up bar and the gas conduit being in the form of an air hose that is attached to the pick-up bar and is connected to the
35 nozzle arrangement.

6. An apparatus as claimed in claim 3, in which the displacement mechanism includes

an axle that is rotatably mounted with respect to the retaining structure;

a motor that is connected to the axle for rotatably driving the axle; and

at least one arm that is connected to an end of the axle, the pick-up bar being pivotally mounted on the, or each, arm, so that, on rotation of the axle, the pick-bar is displaced along the feed path.

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